# Klamath Bird Observatory Spring Point Counts and Fall Area Searches: 2009 Effort Report

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## Introduction

In 2009, the Klamath Bird Observatory (KBO) continued implementing bird and habitat monitoring efforts in southwest Oregon and northern California. These Oregon-Washington and California Partners in Flight (PIF) efforts represent collaboration between KBO and the US Forest Service Redwood Sciences Laboratory to maintain the Klamath Bird Monitoring Network (Alexander et al. 2004b). As part of this Network we maintain long-term efforts to track population trends and demographics at constant effort mist netting stations, breeding bird survey routes, extensive point count and area search routes, and aquatic bird monitoring sites throughout the bioregion. This report summarizes KBO's point count and area search survey efforts. Our demographic monitoring efforts at constant effort mist netting stations are documented in a separate report (Frey et al. 2010).

The objectives of our extensive point count and area search program are to: (1) maintain a long-term monitoring effort for tracking landbird population trends; (2) study bird and habitat relationships to better understand the ecological effect of land management and restoration; and (3) use science to link PIF conservation objectives with priority land management issues.

In 2009 we conducted bird and habitat surveys for long-term monitoring and avian inventory, as well as in conjunction with studies addressing the relationship between birds and fuels reduction, wildfire, grazing, oak woodland restoration, and wetland restoration. During the spring breeding season, KBO surveyed 134 routes including 1952 stations and 159 visits, for a total of 2171 point count surveys completed in 2009 (Table 1). In addition, during the dispersal and migration season, KBO surveyed 25 routes in 28 survey days, consisting of 203 fall area search surveys completed (Table 2).

## Bird and Habitat Surveys

In 2009, Klamath Bird Observatory continued to conduct bird and habitat surveys in southwestern Oregon and northern California. Standard point count and area search survey methodologies were used during breeding and dispersal/migration seasons respectively, and standard vegetation monitoring techniques were followed (Ralph et al. 1993). Point count surveys employ variable circular plot distance sampling

methodologies (Alexander et al. 2004a, Fancy 1997). Area search surveys are completed at the same locations as point count surveys following a 20-minute fixed radius methodology. Habitat surveys are conducted using a relévе methodology at all survey locations (Ralph et al. 1993).

Long-term Monitoring

One of the objectives of Partners in Flight's Monitoring Working Group (Hussell and Ralph 1998), and the North American Bird Conservation Initiative (US NABCI 2007) is to track long-term bird population trends. KBO contributes to this objective by conducting point count surveys on long-term Breeding Bird Survey (BBS) routes, at constant effort mist netting sites, and along additional Klamath Bird Monitoring Network survey routes in the Upper Klamath Basin (Table 1). In addition, KBO continued to monitor a route on the Bear Creek Greenway bike path in Ashland, Oregon. In 2009, we completed the second year of a long-term monitoring project in association with the National Park Service Klamath Network Inventory and Monitoring Program (Stephens et al. In Press). This year surveys were completed at Whiskeytown National Recreation Area, one of six Network parks (Crater Lake National Park, Lassen Volcanic National Park, Lava Beds National Monument, Oregon Caves National Monument, Redwood National and State Parks, and Whiskeytown National Recreation Area) (Table 1).

Wildfire and Fuel Reduction Treatments

In 2009, KBO's fire research focused on fuel reduction projects at a number of sites within the Klamath-Siskiyou Bioregion. In addition, we continued to monitor the Quartz Wildfire, now 8 years post-burn.

We conducted a fifth year of spring and fall bird and habitat surveys in Winema-Fremont National Forest fuel reduction treatment units near Rocky Point. Data collected as part of this effort included before and after treatment surveys. In addition, we completed a fourth year of spring and fall monitoring in both the Chiloquin Community Fuels Reduction and the Ninemile North projects on the Winema-Fremont National Forest (Table 1, Table 2).

We completed a third field season of work within Medford BLM's Rogue River Pilot Project, which was initiated in 2006. This project will reduce fuels along the recreational corridor of the Rogue River from Findley Bend to Galice. Point count stations saturate the upland and riparian habitat within the project area. All points were surveyed twice during the spring to create a robust model of the effects of various fuel treatments on the bird communities in the corridor (Table 1).

Restoration

KBO continued several ongoing studies to monitor the effects of restoration efforts. We completed a fifth year of monitoring on a parcel of private property in the Cascade Siskiyou National Monument, which was fenced in 2004 to exclude cattle, as part of our ongoing work to evaluate the effects of grazing on bird communities within the Monument (Table 1).

In spring of 2009, KBO completed 3 survey visits on a parcel of private land in the Colstin Valley, southwest of Ashland, Oregon. Surveys were completed prior to oak woodland restoration treatments and monitoring will continue after restoration efforts begin (Table 1). This project involves a collaboration with US Fish and Wildife Service Partners for Fish and Wildlife Program and the Lomakatsi Restoration Project.

KBO continued our monitoring efforts at the BLM's Wood River Wetland restoration project (Table 1). The data collected at this important area, and as part of our broad-scale long-term monitoring program in the Upper Klamath Basin, will continue to provide valuable information about the effectiveness of wetland rehabilitation efforts at Wood River.

**Conclusion**

In 2009 the Klamath Bird Observatory continued working with our partners to maintain our Oregon-Washington and California Partners in Flight long-term monitoring program. These efforts, coupled with our long-term demographic monitoring, and efforts implemented by the US Forest Service Redwood Sciences Laboratory and other partners to monitor birds as part of the Klamath Bird Monitoring Network, represents one of the most comprehensive regional bird monitoring programs in the world.

**Acknowledgements**

Our 2009 effort represents an extensive partnership involving many cooperators including: American Bird Conservancy; Ashland Public Schools; Bureau of Land Management Oregon State Office and Medford and Lakeview Districts; Bureau of Reclamation; Charlotte Martin Foundation; City of Ashland; Fremont-Winema, Rogue River - Siskiyou National Forests; Joint Fire Sciences Program; Klamath County, Oregon; Lomakatsi Restoration; National Fish and Wildlife Foundation; National Park Service Klamath Network and Oregon Caves National Monument; Oregon Department of Fish and Wildlife; Oregon Watershed Enhancement Board; Redwood State Parks, Rogue-Siskiyou National Forest; Rogue Valley Audubon Society; Southern Oregon University; United States Fish and Wildlife Service Partners for Fish and Wildlife Program, and others. We would like to acknowledge the contractors that completed spring and fall surveys for KBO: Jim DeStaebler, John Gallo, Lyndia Hammer, Dave Haupt, Sherri Kies, Frank Lospalluto, and Kevin Spencer.

Table 1. KBO point count and vegetation survey effort during spring of 2009 [Spring Stations = number of stations surveyed during spring visits; Spring Visits = number of site visits during spring; Spring Surveys = Total number of surveys during spring].

| Project | Site Code | Site Name | Spring Stations | Spring Visits | Spring Surveys |
|---|---|---|---|---|---|
| **Long-term Monitoring** | | | | | |
| Breeding Bird Survey | BALD MT | Bald Mountain | 50 | 1 | 50 |
| | BARTLE | Bartle | 50 | 1 | 50 |
| | MCCLOUD | McCloud | 50 | 1 | 50 |
| | MEDICINE MT | Medicine Mountain | 50 | 1 | 50 |
| | MERRILL | Merrill | 50 | 1 | 50 |
| | PAUNINA | Paunina | 50 | 1 | 50 |
| | TIONESTA | Tionesta | 50 | 1 | 50 |
| Subtotal | | | 350 | 7 | 350 |
| Ashland | BIKE | Bike Trail | 13 | 1 | 13 |
| Subtotal | | | 13 | 1 | 13 |
| Mist Netting Sites: | 7MIL | Seven Mile | 3 | 1 | 3 |
| Eastside Cascade | CABN | Cabin | 4 | 1 | 4 |
| Range | JOHN | Johnson Creek | 5 | 1 | 5 |
| | ODES | Odessa Creek | 4 | 1 | 4 |
| | TOPS | Topsy | 4 | 1 | 4 |
| | WILL | Williamson River | 4 | 1 | 4 |
| | WOOD | Wood River | 4 | 1 | 4 |
| Subtotal | | | 28 | 7 | 28 |
| Mist Netting Sites: | ANT1 | Antelope Creek | 3 | 1 | 3 |
| Westside Cascade | ASWA | Ashland Watershed | 2 | 1 | 2 |
| Range | HCME | Horse Creek Meadow | 2 | 1 | 2 |
| | JENC | Jefferson Nature Center | 4 | 1 | 4 |
| | NMTP | North Mountain Park | 2 | 1 | 2 |
| | ORCA | Oregon Caves | 2 | 1 | 2 |
| | WIIM | Wildlife Images | 6 | 1 | 6 |
| | WIWI | Willow Wind | 4 | 1 | 4 |
| Subtotal | | | 25 | 8 | 25 |
| National Park Service | WH01 | Whiskeytown 01 | 12 | 1 | 12 |
| Klamath Network | WH02 | Whiskeytown 02 | 12 | 1 | 12 |
| | WH03 | Whiskeytown 03 | 12 | 1 | 12 |
| | WH04 | Whiskeytown 04 | 12 | 1 | 12 |
| | WH05 | Whiskeytown 05 | 12 | 1 | 12 |
| | WH06 | Whiskeytown 06 | 12 | 1 | 12 |
| | WH07 | Whiskeytown 07 | 12 | 1 | 12 |
| | WH08 | Whiskeytown 08 | 12 | 1 | 12 |
| | WH09 | Whiskeytown 09 | 12 | 1 | 12 |
| | WH10 | Whiskeytown 10 | 12 | 1 | 12 |
| | WH11 | Whiskeytown 11 | 12 | 1 | 12 |
| | WH12 | Whiskeytown 12 | 12 | 1 | 12 |
| | WH13 | Whiskeytown 13 | 12 | 1 | 12 |
| | WH14 | Whiskeytown 14 | 12 | 1 | 12 |
| | WH15 | Whiskeytown 15 | 12 | 1 | 12 |
| | WH16 | Whiskeytown 16 | 12 | 1 | 12 |
| | WH17 | Whiskeytown 17 | 12 | 1 | 12 |
| | WH18 | Whiskeytown 18 | 12 | 1 | 12 |
| | WH19 | Whiskeytown 19 | 12 | 1 | 12 |

Table 1 continued.

| Project | Site Code | Site Name | Spring Stations | Spring Visits | Spring Surveys |
|---|---|---|---|---|---|
| **Long-term Monitoring** | | | | | |
| National Park Service Klamath Network *continued* | WH20 | Whiskeytown 20 | 12 | 1 | 12 |
| | WH21 | Whiskeytown 21 | 12 | 1 | 12 |
| | WH22 | Whiskeytown 22 | 12 | 1 | 12 |
| | WH23 | Whiskeytown 23 | 12 | 1 | 12 |
| | WH24 | Whiskeytown 24 | 12 | 1 | 12 |
| | WH25 | Whiskeytown 25 | 12 | 1 | 12 |
| | WH26 | Whiskeytown 26 | 12 | 1 | 12 |
| | WH27 | Whiskeytown 27 | 12 | 1 | 12 |
| | WH28 | Whiskeytown 28 | 12 | 1 | 12 |
| | WH29 | Whiskeytown 29 | 12 | 1 | 12 |
| | WH30 | Whiskeytown 30 | 12 | 1 | 12 |
| Subtotal | | | 360 | 30 | 360 |
| Upper Klamath | AGLA | Agency Lake | 17 | 1 | 17 |
| | CANU | Canoe | 20 | 1 | 20 |
| | CHICKB | Chicken Hill B | 15 | 1 | 15 |
| | CHICKC | Chicken Hill C | 25 | 1 | 25 |
| | GERBER | Gerber Reservoir | 25 | 1 | 25 |
| | MAEG | Mare's Egg | 22 | 1 | 22 |
| | PEBA | Pelican Bay | 23 | 1 | 23 |
| | SOBU | Solomon Butte | 15 | 1 | 15 |
| | SPCR | Spencer Creek | 22 | 1 | 22 |
| | STMT | Stukel Mountain | 23 | 1 | 23 |
| | SURD | Surveyor Mountain D | 20 | 1 | 20 |
| | SURE | Surveyor Mountain E | 20 | 1 | 20 |
| | SUVA | Surveyor Mountain A | 25 | 1 | 25 |
| | TOPSY | Topsy | 15 | 1 | 15 |
| Subtotal | | | 287 | 14 | 287 |
| **Wildfire and Fuels Reduction Treatments** | | | | | |
| Chiloquin | CFR1 | Chiloquin Fuels Reduction 1 | 15 | 1 | 15 |
| | CFR2 | Chiloquin Fuels Reduction 2 | 15 | 1 | 15 |
| | CFR3 | Chiloquin Fuels Reduction 3 | 15 | 1 | 15 |
| | CFR4 | Chiloquin Fuels Reduction 4 | 12 | 1 | 12 |
| | CFR5 | Chiloquin Fuels Reduction 5 | 14 | 1 | 14 |
| | NMN1 | Ninemile North 1 | 15 | 1 | 15 |
| | NMN2 | Ninemile North 2 | 16 | 1 | 16 |
| | NMN3 | Ninemile North 3 | 16 | 1 | 16 |
| | NMN4 | Ninemile North 4 | 16 | 1 | 16 |
| | NMN5 | Ninemile North 5 | 15 | 1 | 15 |
| Subtotal | | | 149 | 10 | 149 |
| Quartz Fire | 230 | Road 230 | 18 | 1 | 18 |
| | 500 | Road 500 | 20 | 1 | 20 |
| | 550 | Road 550 | 20 | 1 | 20 |
| | 600 | Road 600 | 18 | 1 | 18 |
| | 7MLA | Seven Mile Trail | 15 | 1 | 15 |
| | DUGA | Duncan Gap | 20 | 1 | 20 |
| | DUTC | Dutchman Ridge | 15 | 1 | 15 |
| | KEME | Kenney Meadows | 18 | 1 | 18 |
| | LIKA | Lick Gulch A | 16 | 1 | 16 |
| | LIKB | Lick Gulch B | 20 | 1 | 20 |

Table 1 continued.

| Project | Site Code | Site Name | Spring Stations | Spring Visits | Spring Surveys |
|---|---|---|---|---|---|
| **Wildfire and Fuels Reduction Treatments** | | | | | |
| Quartz Fire | PCT | Pacific Crest Trail | 16 | 1 | 16 |
| *continued* | SKAT | Skate Gulch Road | 18 | 1 | 18 |
| | SKAW | Skate Gulch Walk | 16 | 1 | 16 |
| | TRMO | Trillium Mountain | 13 | 1 | 13 |
| | WRAN | Wrangle Camp | 15 | 1 | 15 |
| Subtotal | | | 258 | 15 | 258 |
| Rocky Point | 3455 | Road 3455 | 21 | 1 | 21 |
| | 3633 | Road 3633 | 20 | 1 | 20 |
| | EAGLE | Eagle Ridge | 24 | 1 | 24 |
| | FOMI/PFSS | Four Mile/ Pelican F.S. Station | 12 | 1 | 12 |
| | HARR | Harrison | 12 | 1 | 12 |
| | MASP/MASN | Malone Springs North/ Malone Springs South | 12 | 1 | 12 |
| | MLOC | Mountain Lakes Organizational Camp | 15 | 1 | 15 |
| | PECI | Pelican Cinder Cone | 11 | 1 | 11 |
| | R500 | Road 500 | 20 | 1 | 20 |
| | RECZ | Recreation Creek Z | 11 | 1 | 11 |
| | RPTR | Rocky Point Resort | 13 | 1 | 13 |
| | TOMA | Tomahawk Mountain | 12 | 1 | 12 |
| | VARN | Varney Creek | 19 | 1 | 19 |
| | WOCP/OCPI | West Odessa Cinder Pit/Odessa Cinder Pit | 10 | 1 | 10 |
| Subtotal | | | 212 | 14 | 212 |
| Rogue River | RRP01 | Rogue River Pilot 1 | 8 | 2 | 16 |
| Pilot Project | RRP02 | Rogue River Pilot 2 | 11 | 2 | 22 |
| | RRP03 | Rogue River Pilot 3 | 9 | 2 | 18 |
| | RRP04 | Rogue River Pilot 4 | 11 | 2 | 22 |
| | RRP05 | Rogue River Pilot 5 | 9 | 2 | 18 |
| | RRP06 | Rogue River Pilot 6 | 13 | 2 | 26 |
| | RRP07 | Rogue River Pilot 7 | 9 | 2 | 18 |
| | RRP08 | Rogue River Pilot 8 | 8 | 2 | 16 |
| | RRP09 | Rogue River Pilot 9 | 13 | 2 | 26 |
| | RRP11 | Rogue River Pilot 11 | 12 | 2 | 24 |
| | RRP12 | Rogue River Pilot 12 | 6 | 2 | 12 |
| | RRP13 | Rogue River Pilot 13 | 10 | 2 | 20 |
| | RRP14 | Rogue River Pilot 14 | 9 | 2 | 18 |
| | RRP15 | Rogue River Pilot 15 | 6 | 2 | 12 |
| | RRP16 | Rogue River Pilot 16 | 4 | 2 | 8 |
| | RRP17 | Rogue River Pilot 17 | 12 | 2 | 24 |
| | RRP18 | Rogue River Pilot 18 | 8 | 2 | 16 |
| | RRP19 | Rogue River Pilot 19 | 9 | 2 | 18 |
| | RRP20 | Rogue River Pilot 20 | 9 | 2 | 18 |
| | RRP21 | Rogue River Pilot 21 | 5 | 2 | 10 |
| | RRP22 | Rogue River Pilot 22 | 6 | 2 | 12 |
| | RRPBT | Rogue River Pilot 23 | 13 | 2 | 26 |
| Subtotal | | | 200 | 44 | 400 |

Table 1 continued.

| Project | Site Code | Site Name | Spring Stations | Spring Visits | Spring Surveys |
|---|---|---|---|---|---|
| **Restoration** | | | | | |
| Cascade Siskiyou National Monument | CLAY | Clayton Property | 12 | 1 | 12 |
| Subtotal | | | 12 | 1 | 12 |
| Upper Klamath Basin | NODM/UPWR | North Marsh/Upper Wildlife Refuge | 16 | 1 | 16 |
| Wood River Wetland | PEDI/SODI/ | Petric Dike/South Dike/ | 16 | 1 | 16 |
| | SOSP/LOWR | South Spit/Lower Wood River | | | |
| | SMDI | Sevenmile Dike | 14 | 1 | 14 |
| Subtotal | | | 46 | 3 | 46 |
| USFWS Partners Program | TEMP | Temple | 9 | 3 | 27 |
| Subtotal | | | 9 | 3 | 27 |
| Grand Total | | | 1949 | 157 | 2167 |

Table 2. KBO area search and vegetation survey effort during fall of 2009 [Fall Stations = number of stations surveyed during fall visits; Survey Days = number of survey days to complete the site in fall].

| Project | Site Code | Site Name | Fall Stations | Fall Visits |
|---|---|---|---|---|
| **Wildfire and Fuels Reduction Treatments** | | | | |
| Chiloquin | CFR1 | Chiloquin Fuels Reduction 1 | 7 | 1 |
| | CFR2 | Chiloquin Fuels Reduction 2 | 7 | 1 |
| | CFR3 | Chiloquin Fuels Reduction 3 | 7 | 1 |
| | CFR4 | Chiloquin Fuels Reduction 4 | 7 | 1 |
| | CFR5 | Chiloquin Fuels Reduction 5 | 7 | 1 |
| | NMN1 | Ninemile North 1 | 7 | 1 |
| | NMN2 | Ninemile North 2 | 8 | 1 |
| | NMN3 | Ninemile North 3 | 8 | 1 |
| | NMN4 | Ninemile North 4 | 8 | 1 |
| | NMN5 | Ninemile North 5 | 8 | 1 |
| Subtotal | | | 74 | 10 |
| Rocky Point | 3455 | Road 3455 | 14 | 2 |
| | 3633 | Road 3633 | 16 | 2 |
| | EAGLE | Eagle Ridge | 16 | 2 |
| | FOMI/PFSS | Four Mile/ Pelican Forest Service Station | 6 | 1 |
| | HARR | Harrison | 6 | 1 |
| | MASP/MASN | Malone Springs North/ | 8 | 1 |
| | MLOC | Mountain Lakes Organizational Camp | 8 | 1 |
| | PEBA | Pelican Bay | 8 | 1 |
| | PECI | Pelican Cinder Cone | 7 | 1 |
| | R500 | Road 500 | 8 | 1 |
| | RECZ | Recreation Creek Z | 6 | 1 |
| | RPTR | Rocky Point Resort | 6 | 1 |
| | TOMA | Tomahawk Mountain | 6 | 1 |
| | VARN | Varney Creek | 8 | 1 |
| | WOCP/OCPI | West Odessa Cinder Pit/Odessa Cinder Pit | 6 | 1 |
| Subtotal | | | 129 | 18 |
| Grand Total | | | 203 | 28 |

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